

PATCHED GENES AND THEIR USE

ABSTRACT OF THE INVENTION

Invertebrate and vertebrate *patched* genes are provided, as well as methods
5 for isolation of related genes, where the genes may be of different species or in the
same family. Having the ability to regulate the expression of the *patched* gene,
allows for the elucidation of embryonic development, cellular regulation associated
with signal transduction by the *patched* gene, the identification of agonist and
antagonist to signal transduction, identification of ligands for binding to *patched*,
10 isolation of the ligands, and assaying for levels of transcription and expression of
the *patched* gene.